



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
047,026	6-11-79	Jean E. F. Rivier, et al	37972

Fitch, Even & Tabin  
135 S. La Salle St.  
Chicago, Ill. 60603

EXAMINER	
D.R. Phillips	
EXAM UNIT	PAPER NUMBER
125	3

DATE MAILED: MAILED

This is a communication from the examiner in charge of the application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

OCT 10 1979

GROUP 120

☒ This application has been examined. ☐ Responsive to communication filed on ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION

- ☒ Notice of References Cited, Form PTO-892.
- ☐ Notice of Informal Patent Drawing, PTO-948.
- ☐ Notice of Informal Patent Application, Form PTO-152.
- ☐

Part II SUMMARY OF ACTION

- ☒ Claims 1-6 are pending in the application.  
Of the above, claims are withdrawn from consideration.
- ☐ Claims have been cancelled.
- ☐ Claims are allowed.
- ☒ Claims 1-6 are rejected.
- ☐ Claims are objected to.
- ☐ Claims are subject to restriction or election requirement.
- ☐ The formal drawings filed on are acceptable.
- ☐ The drawing correction request filed on has been ☐ approved. ☐ disapproved.
- ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received. ☐ not been received. ☐ been filed in parent application, serial no. filed on
- ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
- ☐ Other

Art Unit 125

Claims 1-6 are rejected under 35 U.S.C. 103 as obvious over the patents to Shally et al., Johnson et al., Wittle et al. and the Rivier et al. text. The Shally et al., Johnson et al. patents and the Rivier et al. text show LHRH analogs wherein the 6th position of the peptide is substituted by various D-amino acid residues. The Wittle et al. patent indicates that D-His can be substituted in that position in an LHRH analog. It would be well within the skill of an ordinary chemist therefore to substitute the D-His(-imBzl) in the 6th position of LHRH and its ~~D~~<sup>10</sup>As-Gly analog. There is no indication that the instant amino acid radical substituted in the 6th position is patentable as compared to the other amino acids that are known to be substituted at the 6th position of LHRH.

DRPhillips:cdc

(703) 557-2575

10-2-79

*Delbert R. Phillips*Delbert R. Phillips  
Primary Examiner  
Art Unit 125

FORM PTO-46-42  
(REV. 12-76)  
(FORMERLY PTO-892)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

SERIAL NO.

47,036

GROUP ART UNIT

125

ATTACHMENT  
TO  
PAPER  
NUMBER

3

## NOTICE OF REFERENCES CITED

APPLICANT(S)

Rivier, et al

## U.S. PATENT DOCUMENTS

* A	DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
A	4034082	7-5-77	Johnson et al	404	177	
B						
C						
D						
E						
F						
G						
H						
J						
J						
K						

## FOREIGN PATENT DOCUMENTS

* L	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG.	PP. SPEC.
L								
M								
N								
O								
P								
Q								

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

R	
S	
T	
U	

EXAMINER

D. P. Phillips

DATE

9/28/79

\* A copy of this reference is not being furnished with this office action.  
(See Manual of Patent Examining Procedure, section 707.05 (a).)